

Plant Type:

Issuance Date: June 24, 2005
Effective Date: August 1, 2005
Expiration Date: July 31, 2010
Modification Date July 7, 2009

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT and STATE RECLAIMED WATER DISCHARGE PERMIT No. WA0040762

State of Washington DEPARTMENT OF ECOLOGY, SOUTHWEST REGIONAL OFFICE Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law Chapter 90.48 Revised Code of Washington;
The State of Washington Reclaimed Water Act Chapter 90.46 Revised Code of Washington and

The Federal Water Pollution Control Act (The Clean Water Act) Title 33 United States Code, Section 1251 et seq.

State of Washington
DEPARTMENT OF HEALTH
In compliance with the provisions of
Chapter 90.46 and 43.70 Revised Code of Washington
authorizes

City of Yelm 105 Yelm Avenue West P.O. Box 479 Yelm, WA 98597-4079

Plant Location: 931 N.P. Road Northeast Receiving Water: Nisqually River/Ground Water

<u>Waterway Segment Number</u>: 16-11-01 <u>Discharge Location</u>:

<u>Water Body I.D. No.</u>: WA-11-1020 <u>Reclaimed Water</u> distribution for public and private uses throughout the City to include irrigation, constructed

wetlands, and rapid infiltration basins.

STEP collection followed by secondary treatment Power Canal (Standby Outfall)

(SBRs), and coagulation and flocculation with filtration and chlorine disinfection to meet Class A reclaimed water requirements.

Latitude: 46° 57' 21" N Longitude: 122° 35' 08" W

Nisqually River (Emergency Outfall Only)

Latitude: 46° 57′ 37″ N Longitude: 122° 34′ 17″ W

is authorized to discharge in accordance with the special and general conditions that follow.

Garin Schrieve, P.E. Southwest Regional Manager Water Quality Program Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.	Discharge Monitoring Report	Monthly	September 15, 2005
S3.E	Noncompliance Notification	As necessary	
S4.B.	Plans for Maintaining Adequate Capacity	As necessary	
S4.C.	Notification of New or Altered Sources	As necessary	
S4.D.	Infiltration and Inflow Evaluation	Annually	May 15, 2006
S4.E.	Waste load Assessment	Annually	May 15, 2006
S6.D.	Annual Industrial User Survey	Annually	February 15, 2006
S8.	Outfall Evaluation	#001 daily, #002 and #003 monthly	Report monthly on DMRs
G1.	Notice of Change in Authorization	As necessary	
G4.	Reporting Planned Changes	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7.	Application for Permit Renewal	1/permit cycle	February 1, 2010
G21	Reporting Anticipated Non-compliance	As necessary	
G22	Reporting Other Information	As necessary	

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

A. Effluent Limitations – Outfall #001 Reclaimed Water

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

The production and use of reclaimed water shall be in compliance with all specific conditions and requirements of the Washington State Water Reclamation and Reuse Standards, 1997, and is subject to the requirements listed below:

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to distribute Class A reclaimed water to public and private entities for commercial and industrial uses and/or to apply reclaimed water to land for irrigation at agronomic rates and ground water recharge by surface percolation at locations listed in special condition S9.A. The permittee may also be discharging Class A Reclaimed Water to the Centralia Power Canal and the Nisqually River on a limited basis. The distribution and use of reclaimed water is subject to the following treatment and water quality limitations:

	EFFLUENT LIMITATIONS: OUTFALL # 001 RECLAIMED WATER ^c			
Parameter	Average Monthly ^a	Average Weekly ^a		
Biochemical Oxygen Demand (5 day)	30 mg/L	N/A		
Total Suspended Solids	30 mg/L	N/A		
Dissolved Oxygen	Shall be measurably present in the discharge at all times			
рН	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.			
Parameter	7-Day Limit ^a	Sample Maximum ^b		
Total Coliform Bacteria	2.2 count/100 mL	23 count/100 mL		
Parameter	Average Monthly ^a	Sample Maximum ^b		
Turbidity	2 NTU 5 NTU			
Total Nitrogen, as the sum of TKN, Nitrate and Nitrite	10 mg/L 15 mg/L			

^aThe average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of the seven-day limit for total coliform, which shall be based on the maximum median number of total coliform from the bacteriological results of the last seven days for which analyses have been completed.

^bThe sample maximum for total coliform and total nitrogen is the highest allowable value for any sample, and for turbidity the highest allowable validated or official measurement.

A validated or official measurement for a turbidimeter varies by manufacturer and operator settings, but the basic concepts are the same. Before a continuous reading turbidimeter will recognize and record a turbidity measurement there must first be a minimum number of consecutive measurements that have the same value or not be different in value by more than a specified percent.

^cA chlorine residual of at least 0.5 mg/L shall be maintained in the reclaimed water during conveyance to the use area, or the storage facility. This requirement is designed to protect the distribution system from clogging due to microbial slime build-up.

B. Effluent Limitations – Outfall #002 Centralia Power Canal

Beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge municipal wastewater at the permitted location subject to the following limitations:

Whenever flows in the Power Canal drops below 200 cfs, the City of Yelm must cease discharging effluent to the Centralia Power Canal.

	EFFLUENT LIMITATIONS: OUTFALL # 002 CENTRALIA POWER CANAL			
Parameter	Average Monthly ^a	Average Weekly ^a		
Biochemical Oxygen Demand (5 day) ^b	30 mg/L, 250 lbs/day 85% Removal	45 mg/L 375 lbs/day		
Total Suspended Solids ^b	30 mg/L, 250 lbs/day 85% Removal	45 mg/L 375 lbs/day		
Fecal Coliform Bacteria	100 count/100 mL	200 count/100 mL		
рН	Daily minimum is equal to or greater than 6 and the daily max is less than or equal to 9.			
Total Residual Chlorine 0.5 mg/L		0.75 mg/L		
Total Ammonia (as NH ₃ -N)	3 mg/L	4.5 mg/L		

^aThe average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

C. Effluent Limitations – Outfall #003 Nisqually River

Beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge municipal wastewater at the permitted location as an emergency backup subject to the following limitations:

^bThe Permittee will be presumed to be in compliance with the percent removal requirement in the permit if the permit effluent concentration is met and there is no excessive inflow and infiltration (I/I). Infiltration is excessive when the highest 7-14 day average daily dry weather flow is greater than 120 gallons per capita per day. Inflow is excessive when the highest recorded daily flow during a storm event is greater than 275 gallons per capita per day or when hydraulic overloading of the treatment plant occurs.

	EFFLUENT LIMITATIONS: OUTFALL # 003 NISQUALLY RIVER		
Parameter	Average Monthly ^a	Average Weekly ^a	
Biochemical Oxygen ^c Demand (5 day)			
Total Suspended Solids ^c	30 mg/L, 250 lbs/day 85% Removal	45 mg/L 375 lbs/day	
Fecal Coliform Bacteria	100 count/100 mL	200 count/100 mL	
рН	Daily minimum is equal to or greater than 6.5 and the daily maximum is less than or equal to 9.		
Total Ammonia (as NH ₃ -N)	3 mg/L	4.5 mg/L	
Parameter	Average Monthly ^a	Daily Maximum ^b	
Total Residual Chlorine	0.047 mg/L	0.124 mg/L	
Total Lead	10 μg/L 15 μg/L		

^aThe average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

The Permittee will be presumed to be in compliance with the percent removal requirement in the permit if the permit effluent concentration is met and there is no excessive inflow and infiltration (I/I). Infiltration is excessive when the highest 7-14 day average daily dry weather flow is greater than 120 gallons per capita per day. Inflow is excessive when the highest recorded daily flow during a storm event is greater than 275 gallons per capita per day or when hydraulic overloading of the treatment plant occurs.

D. Ground Water Recharge Criteria for Ground Water Recharge by Surface Percolation

An exceedance of the following groundwater enforcement limits will be evaluated by the Department in accordance with the <u>Implementation Guidance for the Ground Water</u> Quality Standards to determine compliance with standards.

GROUND WATER ENFORCEMENT LIMITATIONS ^a :			
Primary Drinking Water Criteria	Sample Concentration ^b		
Arsenic	10 μg/L		
Cadmium	5 μg/L		
Chromium	100 μg/L		
Mercury	2 μg/L		

^bThe maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

GROUND WATER ENFORCEMENT LIMITATIONS ^a :				
Primary Drinking Water Criteria	Sample Concentration ^b			
Nickel	100 μg/L			
Nitrate as N	10 mg/L			
Nitrite as N	1.0 mg/L			
Fecal Coliform Bacteria	Non Detect (ND)			
Total Trihalomethanes (TTHM)	100 μg/L			
Other Ground Water Criteria	Sample Concentration ^b			
Conductivity	700 umhos/cm			
Copper	1300 μg/L			
Fluoride	2.0 mg/L			
Lead	15 μg/L			
Silver	100 μg/L			
Sulfate	250 mg/L			
Total Dissolved Solids	500 mg/L			
Zinc	5000 μg/L			
^a These Groundwater Enforcement Limits apply to downgradient monitoring wells MW2, MW3, and MW4.				

E. **Mixing Zone Descriptions**

The maximum boundaries of the mixing zones are defined as follows:

Outfall #002 - Discharge to the Centralia Power Canal - The entire canal extending to the point at which the canal flow re-enters the Nisqually River (RM 12.6). The acute dilution ratio for the Power Canal is 172:1 and the chronic dilution ratio is 195:1.

Outfall #003 - Discharge to the by-pass section of the Nisqually River at the Yelm Diversion Hydroelectric Project

Acute Mixing Zone: 19.7 feet wide, extends 30.15 feet downstream and 10.0 feet upstream. The acute dilution ratio for the Nisqually River is 6.5:1.

Chronic Mixing Zone: 19.7 feet wide, extends 301.5 feet downstream and 100.0 feet upstream. The chronic dilution ratio for the Nisqually River is 20:1.

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^bThe maximum concentration is the highest allowable concentration for any sample as measured in the ground water at the top of the uppermost aquifer beneath or down gradient of the infiltration site.

S2. MONITORING REQUIREMENTS

Monthly, Quarterly, or yearly samples collected during the month shall not need to be resampled should the discharge location change due to a shutdown of the power canal, or if there is a loss or resumption of reclaimed water production.

A. <u>Influent Monitoring Schedule^(a)</u>

The sampling point for the influent will be at the influent meter vault just prior to the influent structure or tower.

The Permittee shall monitor the wastewater influent according to the following schedule:

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Wastewater Influent	Flow	MGD	Continuous ^(b)	measurement
Wastewater Influent	BOD ₅	mg/L lbs/day	2/week	24-hour composite
Wastewater Influent	TSS	mg/L lbs/day	2/week	24-hour composite

⁽a) For all monitoring, the Permittee shall use methods that can achieve a method detection level (MDL) equal to 0.1 times the effluent limitation or the most sensitive Environmental Protection Agency (EPA) approved method, whichever is greater. If the analytical result for any sample is below the MDL, the permittee shall report "less than {numeric MDL}" on the DMR. For purposes of averaging results, the Permittee shall use actual values for all values above the MDL and zero for values below the MDL.

B. Monitoring Schedule: Outfall #001 - Reclaimed Water Discharge^(e)

The sampling point for the reclaimed water effluent will be the exit from the chlorine contact chamber prior to entering the reclaimed water wet well.

The Permittee shall monitor the wastewater according to the following schedule:

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Disinfected reclaimed water	Flow	MGD	continuous ^(f)	totalizer
Disinfected reclaimed water	BOD ₅	mg/L lbs/day	2/week	24-hour composite

⁽b) Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken every four hours when continuous monitoring is not possible.

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Disinfected reclaimed water	TSS	mg/L lbs/day	2/week	24-hour composite
Disinfected reclaimed water	Total Coliform ^d Bacteria	cfu/100mL	daily	grab ^a
Disinfected reclaimed water	Turbidity ^b	NTU	recorded every 4 hours	continuous recording turbidimeter
Disinfected reclaimed water	Total Residual Chlorine ^c	mg/L	daily	grab ^a
Disinfected reclaimed water	Dissolved Oxygen	mg/L	daily	grab ^a
Disinfected reclaimed water	рН	Standard Units	daily	measurement
Disinfected reclaimed water	Temperature	°C	daily	measurement
Disinfected reclaimed water	Hardness (as CaCO ₃)	mg/L	monthly	grab ^a
Disinfected reclaimed water	TKN (as N)	mg/L	monthly	24-hour composite
Disinfected reclaimed water	Nitrate NO ₃ (as N)	mg/L	monthly	24-hour composite
Disinfected reclaimed water	Nitrite NO ₂ (as N)	mg/L	monthly	24-hour composite
Disinfected reclaimed water	Total Nitrogen	mg/L	Monthly	TKN + Nitrate + Nitrite
Disinfected reclaimed water	Total Dissolved Solids	mg/L	monthly	measurement

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Disinfected reclaimed water	Alkalinity (CaCO ₃)	mg/L	monthly	24-hour composite
Disinfected reclaimed water	Conductivity	umhos/cm	monthly	24-hour composite
Disinfected reclaimed water	Chloride	mg/L	monthly	24-hour composite
Disinfected reclaimed water	Flouride	mg/L	monthly	24-hour composite
Disinfected reclaimed water	Sulfate	mg/L	monthly	24-hour composite
Disinfected reclaimed water	Total Metals: Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Silver, Zinc	ug/L	quarterly ^(g)	24-hour composite
Disinfected reclaimed water	Total Trihalomethanes (TTHM)	mg/L	quarterly ^(g)	24-hour composite
Disinfected reclaimed water	Priority Pollutant Scan	mg/L	yearly ^(h)	24-hour composite

^aGrab samples shall be collected at a time when wastewater characteristics are most demanding on the treatment facilities and disinfection procedures.

^bTurbidity analysis shall be performed by a continuous recording turbidimeter and shall be recorded at least every four hours.

^cTotal residual chlorine analysis shall be performed at the same time as the total coliform sample is collected.

^dAs an alternate method, total coliform bacteria may be monitored using the ONPUG-MUG test (also called Autoanalysis Colilert System) per latest edition of standard methods.

^e For all monitoring, the Permittee shall use methods that can achieve a method detection level (MDL) equal to 0.1 times the effluent limitation or the most sensitive EPA approved method, whichever is greater. If the analytical result for any sample is below the MDL, the permittee shall report "less than {numeric MDL}" on the DMR. For purposes of averaging results, the permittee shall use actual values for all values above the MDL and zero for values below the MDL.

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
f Continuous mea	ons uninterrunted excen	t for brief lengths	of time for calibration	for nower failure or

¹Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken every four hours when continuous monitoring is not possible.

C. Monitoring Schedule: Outfall #002 – Centralia Power Canal^(c)

The sampling point for the surface water discharge to the Centralia Power Canal will be the exit from the chlorine contact chamber prior to entering the reclaimed water wet well. The sampling point for total residual chlorine will be in the surface water discharge line from the reclaimed water wet well.

The following constituents shall be monitored at the frequency and with the type of measurement indicated. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report (DMR) Form that no discharge occurred.

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Secondary effluent	Flow	MGD	Continuous ^(d)	totalizer
Secondary effluent	BOD ₅	mg/L lbs/day	2/week	24-hour composite
Secondary effluent	TSS	mg/L lbs/day	2/week	24-hour composite
Secondary effluent	рН	Standard Units	daily	measurement
Secondary effluent	Fecal Coliform Bacteria ^b	cfu/100mL	2/week	grab ^a
Secondary effluent	Dissolved Oxygen	mg/L	daily	measurement
Secondary effluent	Total Residual Chlorine	mg/L	daily	grab ^a
Secondary effluent	Temperature	°C	daily	measurement
Secondary effluent	Hardness (as CaCO ₃)	mg/L	monthly	grab ^a
Secondary effluent	Total Ammonia (as NH ₃ -N)	mg/L	monthly	24-hour composite

^g Quarterly is defined as calendar quarters ending the last day of: March, June, September, and December.

^h Yearly is defined as March

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Secondary effluent	Total Metals: Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Silver, Zinc	ug/L	quarterly ^(e)	24-hour composite

^aGrab samples shall be collected at a time when wastewater characteristics are most demanding on the treatment facilities and disinfection procedures.

^bTesting for fecal coliform bacteria will not be required as long as each daily result from the total coliform bacteria test for the effluent is less than the monthly average permit limit set for fecal coliform. When any result for total coliform exceeds the monthly limit for fecal coliform, the fecal coliform test shall be performed a minimum of twice a week until each result from the last 7 test for total coliform are less than the fecal coliform monthly limit.

^cFor all monitoring, the Permittee shall use methods that can achieve a method detection level (MDL) equal to 0.1 times the effluent limitation or the most sensitive EPA approved method, whichever is greater. If the analytical result for any sample is below the MDL, the permittee shall report "less than {numeric MDL}" on the DMR. For purposes of averaging results, the permittee shall use actual values for all values above the MDL and zero for values below the MDL.

^dContinuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken every four hours when continuous monitoring is not possible.

^eQuarterly is defined as: March, June, September, and December

D. <u>Monitoring Schedule: Outfall #003 – Nisqually River^(f)</u>

The sampling point for the surface water discharge to the Nisqually River will be the exit from the chlorine contact chamber prior to entering the reclaimed water wet well. The sampling point for total residual chlorine will be in the surface water discharge line from the reclaimed water wet well after SO_2 addition and far enough in the discharge line to allow for the proper SO_2 contact time.

The following constituents shall be monitored at the frequency and with the type of measurement indicated. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report (DMR) Form that no discharge occurred.

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Secondary effluent	Flow ^b	MGD	continuous (g)	totalizer
Secondary effluent	BOD ₅ ^c	mg/L lbs/day	2/week	24-hour composite
Secondary effluent	TSS ^c	mg/L lbs/day	2/week	24-hour composite

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Secondary effluent	рН	Standard Units	daily	measurement
Secondary effluent	Fecal Coliform Bacteria ^c	cfu/100mL	2/week	grab ^a
Secondary effluent	Dissolved Oxygen	mg/L	daily	measurement
Secondary effluent	Total Residual Chlorine	mg/L	daily	grab ^a
Secondary effluent	Temperature	°C	daily	measurement
Secondary effluent	Hardness (as CaCO ₃)	mg/L	monthly	grab ^a
Secondary effluent	Total Ammonia (as NH ₃ -N) ^d	mg/L	monthly	grab ^a
Secondary effluent	Total Lead ^d	ug/L	monthly	24-hour composite
Secondary effluent	Total Metals ^e : Arsenic, Cadmium, Chromium, Copper, Iron, Manganese, Mercury, Nickel, Silver, Zinc	ug/L	quarterly ^(h)	24-hour composite

^aGrab samples shall be collected at a time when wastewater characteristics are most demanding on the treatment facilities and disinfection procedures.

^bThe average daily flow of the discharge (MGD), the maximum day flow of the discharge (MGD), and the total flow discharged (MG), during the reporting period shall be reported on the DMR. The date and time of the start and termination of each discharge shall be reported.

^cIf the discharge is less than three days in duration a minimum of one sample shall be taken during the discharge, if the discharge is greater than three days in duration a minimum of two samples shall be taken during the first week and two each following week. All of the samples collected during the seven-day or 30-day period are to be used in determining the averages. If only one sample is collected during the period, it must be considered the same as the average for that period. The permittee always has the option of collecting additional samples if appropriate.

Testing for fecal coliform bacteria will not be required as long as each daily result from the total coliform bacteria test for the effluent is below the monthly average permit limit set for fecal coliform. When any result for total coliform exceeds the monthly limit for fecal coliform, the fecal coliform test shall be performed a minimum of twice a week until each result from the last 7 test for total coliform are below the fecal coliform monthly limit.

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
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^dA minimum of one sample shall be taken during any discharge. If the discharge is greater than one month in duration samples shall be taken a minimum of once a month. All of the samples collected during the sampling period are to be used in determining the averages. If only one sample is collected during the period, it must be considered the same as the average for that period. The permittee always has the option of collecting additional samples if appropriate.

^eA minimum of one sample shall be taken during any discharge. If the discharge is greater than three months in duration samples shall be taken a minimum of once every three months. All of the samples collected during the sampling period are to be used in determining the averages. If only one sample is collected during the period

^fFor all monitoring, the permittee shall use methods that can achieve a method detection level (MDL) equal to 0.1 times the effluent limitation or the most sensitive EPA approved method, whichever is greater. If the analytical result for any sample is below the MDL, the permittee shall report "less than {numeric MDL}" on the DMR. For purposes of averaging results, the permittee shall use actual values for all values above the MDL and zero for values below the MDL.

^gContinuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken every four hours when continuous monitoring is not possible.

^hQuarterly is defined as: March, June, September, and December

E. Monitoring Schedule: Ground Water Recharge by Surface Percolation^(a)

The sampling points for ground water monitoring will be the six monitoring wells located at the infiltration area.

Ground water purging and sampling shall follow the protocol described in Chapter 5 of the Department's Implementation Guidance for the Ground Water Quality Standards (Publication #96-02).

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Monitoring wells	Static well water level elevation	feet above sea level	quarterly (b)	Field measurement
Monitoring wells	Temperature	°C	quarterly ^(b)	Field measurement
Monitoring wells	Dissolved Oxygen	mg/L	quarterly ^(b)	Field measurement
Monitoring wells	рН	Standard Units	quarterly ^(b)	Field measurement
Monitoring wells	Conductivity	umhos/cm	quarterly (b)	Field measurement
Monitoring wells	Nitrate as N	mg/L	quarterly ^(b)	grab
Monitoring wells	Nitrite as N	mg/L	quarterly (b)	grab

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Monitoring wells	TKN (as N)	mg/L	quarterly ^(b)	grab
Monitoring wells	Total Nitrogen	mg/L	quarterly ^(b)	TKN + Nitrate + Nitrite
Monitoring wells	Ammonia as N	mg/L	quarterly ^(b)	grab
Monitoring wells	Total Dissolved Solids	mg/L	quarterly ^(b)	grab
Monitoring wells	Fecal Coliform Bacteria	cfu/100mL	quarterly (b)	grab
Monitoring wells	Chloride	mg/L	quarterly (b)	grab
Monitoring wells	Fluoride	mg/L	quarterly ^(b)	grab
Monitoring wells	Dissolved Organic Carbon	mg/L	quarterly ^(b)	grab
Monitoring wells	Total Trihalomethanes	mg/L	quarterly ^(b)	grab
Monitoring wells	Cations/Anions: Bicarbonate, Calcium, Carbonate, Magnesium, Potassium, Sodium, Sulfate	mg/L	yearly ^(c)	grab
Monitoring wells	Total Metals: Arsenic, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Silver, Zinc	μg/L	yearly ^(c)	grab

^aFor all monitoring, the Permittee shall use methods that can achieve a method detection level (MDL) equal to 0.1 times the effluent limitation or the most sensitive EPA approved method, whichever is greater. If the analytical result for any sample is below the MDL, the permittee shall report "less than {numeric MDL}" on the DMR. For purposes of averaging results, the permittee shall use actual values for all values above the MDL and zero for values below the MDL.

^bQuarterly is defined as: March, June, September, and December

^cYearly is defined as March

F. Monitoring Schedule: Influent to Cochrane Park Rapid Infiltration Basins^(a)

The sampling point for the influent to the rapid infiltration basins (RIBs) at Cochrane Park will be from catch basin CS#4 in pond three.

The Permittee shall monitor the influent to the rapid infiltration basins according to the following schedule:

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
Influent to RIBs	Ammonia as N	mg/L	Quarterly ^b	Grab
Influent to RIBs	Chloride	mg/L	Quarterly ^b	Grab
Influent to RIBs	Fecal Coliform	CFU/100 ml	Quarterly ^b	Grab
Influent to RIBs	Nitrate as N	mg/L	Quarterly ^b	Grab
Influent to RIBs	Nitrite as N	mg/L	Quarterly ^b	Grab
Influent to RIBs	TKN	mg/L	Quarterly ^b	Grab
Influent to RIBs	Total Nitrogen	mg/L	Quarterly ^b	TKN + Nitrate + Nitrite
Influent to RIBs	TDS	mg/L	Quarterly ^b	Grab

^aFor all monitoring, the Permittee shall use methods that can achieve a method detection level (MDL) equal to 01 times the effluent limitation of the most sensitive EPA approved method, whichever is greater. If the analytical result for any sample is below the MDL, the Permittee shall report "less than {numeric MDL}" on the DMR. For purposes of averaging results, the Permittee shall use actual values for all values above the MDL and zero for the values below the MDL.

G. <u>Monitoring Schedule: Sludge</u>

The Permittee shall monitor sludge according to the following schedule:

Category	Parameter	Units	Minimum Sampling Frequency	Sample Type
STEP Septic Tanks	Sludge depth	feet	once every 3 years or as needed	measurement

^bQuarterly is defined as: March, June, September, and December.

H. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Ground water sampling shall conform to the latest protocols in the Implementation Guidance for the Ground Water Quality Standards, (Ecology 1996).

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 Code of Federal Regulations (CFR) Part 136, unless otherwise specified in this permit or approved in writing by the Department.

I. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

J. <u>Instrument Calibration</u>

Monitoring devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with the manufacturer's recommendations. Calibration records shall be maintained for at least three years.

The Permittee shall also verify the accuracy of on-line turbidimeters at a minimum frequency of at least once every three months.

K. <u>Laboratory Accreditation</u>

All monitoring data required by the Departments of Health and Ecology shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 Washington Administrative Code (WAC). Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters except those listed in Special Condition S2 are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited.

Crop and soils testing has not been included in the accreditation program. Crop and soils data shall be provided by reputable agricultural test lab that is an active participant in a nationally recognized agricultural laboratory proficiency testing program.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall maintain records and report to the Departments of Health and Ecology in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by the Department. DMR forms shall be received by the Department no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than 45 days following the monitoring period. Unless otherwise specified, all toxicity test data shall be submitted within 60 days after the sample date. The report(s) shall be sent to the Department of Ecology, Southwest Regional Office, P.O. Box 47775, Olympia, Washington 98504-7775 and the Department of Health, 1500 West 4th Avenue, Suite 305, Spokane, Washington 99204.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected.

DMR forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Department.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of such

monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. <u>Noncompliance Notification</u>

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

- 1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to the Department within 30 days after becoming aware of the violation.
- 2. Immediately notify the Department of the failure to comply.
- 3. Submit a detailed written report to the Department within 30 days (five days for upsets and bypasses), unless requested earlier by the Department. The report shall contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Maintaining a Copy of This Permit

A copy of this permit must be kept at the treatment plant and be made available upon request to the public or the Department inspectors.

G. Reclaimed Water Operational Records

- 1. Operating records shall be maintained at the reclamation treatment plant or within a central depository within the Permittee's operating agency. These records shall include: records of all analyses performed, records of operational problems, unit process and equipment breakdowns, and diversions to emergency storage or disposal; and all corrective or preventative action taken.
- 2. Process or equipment failures triggering an alarm that is key to maintaining reliability of reclaimed water quality shall be recorded and maintained as a separate record file. The recorded information shall include the time and cause of failure and corrective actions taken to remediate and prevent reoccurrence.
- 3. A monthly summary of operating records as specified above shall be submitted with the Discharge Monitoring Report form to the Departments of Ecology and Health at the address listed under S3.A above.
- 4. Cross Connection Control Report. An annual cross-connection control report shall be submitted to the Departments of Health by a certified Cross-Control

Specialist identifying all devices tested and any cross-connection incidents which occurred in the reuse system.

S4. FACILITY LOADING

A. Design Criteria

Flows or waste loadings of the following design criteria for the permitted treatment facility shall not be exceeded:

Average flow for the maximum month: 1.0 MGD

BOD₅ loading for maximum month: 2,000 lbs/day

TSS loading for maximum month: 430 lbs/day

B. Plans for Maintaining Adequate Capacity

The Permittee shall submit to the Department a plan and a schedule for continuing to maintain capacity when:

- 1. The actual flow or waste load reaches 85 percent of any one of the design criteria in S4.A for three consecutive months; or
- 2. When the projected increase would reach design capacity within five years,

Whichever occurs first. If such a plan is required, it shall contain a plan and schedule for continuing to maintain capacity. The capacity as outlined in this plan must be sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet the objective of maintaining capacity.

- 3. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.
- 4. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
- 5. Limitation on future sewer extensions or connections or additional waste loads.
- 6. Modification or expansion of facilities necessary to accommodate increased flow or waste load.
- 7. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. If the permittee intends to apply for state or federal funding for the design

or construction of a facility project, the plan must also meet the requirements of a "Facility Plan" as described in 40 CFR 35.2030. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Notification of New or Altered Sources

The Permittee shall submit written notice to the Department whenever any new discharge or a substantial change in volume or character of an existing discharge into the Publicly Owned Treatment Works (POTW) is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the POTW; (2) is not part of an approved general sewer plan or approved plans and specifications; or (3) would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the POTWs ability to adequately transport and treat the added flow and/or waste load, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)].

D. Infiltration and Inflow Evaluation

- 1. The Permittee shall conduct an infiltration and inflow evaluation. Refer to the U.S. EPA publication, *I/I Analysis and Project Certification*, available as Publication No. 97-03 at: Publications Office, Department of Ecology, P.O. Box 47600, Olympia, Washington, 98504-7600. Plant monitoring records may be used to assess measurable infiltration and inflow.
- 2. A report shall be prepared which summarizes any measurable infiltration and inflow. If infiltration and inflow have increased by more than 15 percent from that found in the first report based on equivalent rainfall, the report shall contain a plan and a schedule for: (1) locating the sources of infiltration and inflow; and (2) correcting the problem.
- 3. The report shall be submitted by **May 15, 2006**, and **annually** thereafter.

E. Waste load Assessment

The Permittee shall conduct an annual assessment of their flow and waste load and submit a report to the Department by May 15, 2006, a_and annually thereafter. The report shall contain the following: an indication of compliance or noncompliance with the permit effluent limitations; a comparison between the existing and design monthly average dry weather and wet weather flows, peak flows, Biochemical Oxygen Demand (BOD), and Total Suspended Solids (TSS) loadings; and (except for the first report) the percentage increase in these parameters since the last annual report. The report shall also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above. The interval for review and reporting may be modified if the Department determines that a different frequency is sufficient.

S5. OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. <u>Certified Operator</u>

An operator certified for at least a **Class III** plant by the state of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a **Class II** plant shall be in charge during all regularly scheduled shifts.

B. O & M Program

The Permittee shall institute an adequate operation and maintenance program for the entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to the Department, if possible, 30 days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of its obligations under this permit.

D. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes.

The Permittee shall maintain Reliability Class II (EPA 430/9-74-001) at the wastewater treatment plant, which requires a backup power source sufficient to operate all vital components and critical lighting and ventilation during peak wastewater flow conditions, except vital components used to support the secondary processes (i.e., mechanical aerators or aeration basin air compressors) need not be operable to full levels of treatment, but shall be sufficient to maintain the biota.

E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and the Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible at least 10 days before the date of the bypass.

2. Bypass which is unavoidable, unanticipated and results in noncompliance of this permit.

This bypass is permitted only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
- b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
- c. The Department is properly notified of the bypass as required in Condition S3E of this permit.
- 3. Bypass which is anticipated and has the potential to result in noncompliance of this permit.

The Permittee shall notify the Department at least 30 days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives

including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with State Environmental Policy Act (SEPA); (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under Revised Code of Washington (RCW) 90.48.120.

G. Operations and Maintenance Manual

The approved Operations and Maintenance Manual shall be kept available at the treatment plant and all operators shall follow the instructions and procedures of this manual. The Operation and Maintenance Manual for the facility shall include the following reclaimed water information:

- 1. An alarm condition response plan to ensure that no untreated or inadequately treated wastewater will be delivered to the use areas.
- 2. A discussion of the cross-connection control and inspection program, including who will be responsible for compliance and testing of cross connection control devices.

3. Operational strategies for the reclaimed water use areas.

H. Maintenance of STEP Tanks

All tanks shall be inspected and measured at least once every three years. The contents of the tanks shall be removed when the clear space is one-third of the fluid depth or when the scum layer is within three inches of the bottom of the scum baffle.

I. Removal of Sludge from the Equalization Basin

Sludge shall be removed from the equalization basin when the average depth reaches one foot. If sludge accumulates to a depth greater than two and a half feet in any area of the basin, the solids shall be removed from the accumulated area or from the entire pond.

J. Reclaimed Water System Maintenance

The Permittee shall institute an adequate operation and maintenance (O&M) program for the entire reclamation facility. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, collection, distribution and use areas. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

- 1. At all times, the reclamation facility, distribution and use areas shall be maintained to ensure that all equipment is kept in a reliable operating condition.
- 2. A chlorine residual of at least 0.5 mg/l shall be maintained in the reclaimed water during conveyance from the reclamation plant to the use area unless waived by the Departments of Health and Ecology.
- 3. Maintenance of a chlorine residual is not required in reclaimed water impoundments and storage ponds. At the discretion of the Departments of Health and Ecology, chlorine residual may not be required in reclaimed water distributed from storage ponds.

S6. PRETREATMENT

A. General Requirements

The Permittee shall work with the Department to ensure that all commercial and industrial users of the POTW are in compliance with the pretreatment regulations promulgated in 40 CFR Part 403 and any additional regulations that may be promulgated under Section 307(b) (pretreatment) and 308 (reporting) of the Federal Clean Water Act.

B. Wastewater Discharge Permit Required

The Permittee shall not allow significant industrial users (SIUs) to discharge wastewater to the Permittee's sewerage system until such user has received a wastewater discharge permit from the Department in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC, as amended.

C. <u>Identification and Reporting of Existing, New, and Proposed Industrial Users</u>

- 1. The Permittee shall take continuous, routine measures to identify all existing, new, and proposed SIUs and potential significant industrial users (PSIUs) discharging or proposing to discharge to the Permittee's sewerage system (see Appendix B of Fact Sheet for definitions).
- 2. Within 30 days of becoming aware of an unpermitted existing, new, or proposed industrial user who may be an SIU, the Permittee shall notify such user by registered mail that, if classified as an SIU, they shall be required to apply to the Department and obtain a state waste discharge permit. A copy of this notification letter shall also be sent to the Department within this same 30-day period.
- 3. The Permittee shall also notify all PSIUs, as they are identified, that if their classification should change to an SIU, they shall be required to apply to the Department for a State Waste Discharge Permit within 30 days of such change.

D. <u>Annual Submittal of List of Industrial Users</u>

The Permittee shall submit annually to the Department a list summarizing all existing and proposed SIUs and PSIUs. This list must be received by the Department by **February 15, 2006**, and annually thereafter.

E. <u>Duty to Enforce Discharge Prohibitions</u>

- 1. In accordance with 40 CFR 403.5(a), the Permittee shall not authorize or knowingly allow the discharge of any pollutants into its POTW which cause pass through or interference, or which otherwise violates general or specific discharge prohibitions contained in 40 CFR Part 403.5 or WAC-173-216-060.
- 2. The Permittee shall not authorize or knowingly allow the introduction of any of the following into their treatment works:
 - a. Pollutants which create a fire or explosion hazard in the POTW (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21).
 - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.
 - c. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.
 - d. Any pollutant, including oxygen demanding pollutants, (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.

- e. Petroleum oil, nonbiodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.
- f. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.
- g. Heat in amounts that will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities such that the temperature at the POTW headworks exceeds 40°C (104°F) unless the Department, upon request of the Permittee, approves, in writing, alternate temperature limits.
- h. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.
- i. Wastewaters prohibited to be discharged to the POTW by the Dangerous Waste Regulations (Chapter 173-303 WAC), unless authorized under the Domestic Sewage Exclusion (WAC 173-303-071).
- 3. All of the following are prohibited from discharge to the POTW unless approved in writing by the Department under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or the need to augment sewage flows due to septic conditions):
 - a. Noncontact cooling water in significant volumes.
 - b. Stormwater, and other direct inflow sources.
 - c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment, or would not be afforded a significant degree of treatment by the system.
- 4. The Permittee shall notify the Department if any industrial user violates the prohibitions listed in this section.

S7. RESIDUAL SOLIDS

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters.

S8. OUTFALL EVALUATIONS

<u>Outfall #001 Reclaimed Water Distribution</u> - The Permittee shall inspect public uses and impoundments of reclaimed water on at least a daily basis and private uses and impoundment's on at least a quarterly basis.

Outfall #002 Centralia Power Canal - The Permittee shall visually inspect the discharge location once per month and verify the integrity and continued function of the side bank discharge into the Power Canal at least once per year.

<u>Outfall #003 Nisqually River</u> - The Permittee shall visually inspect the discharge location once per month and the Tideflex valve during low flow conditions in the Nisqually River at least once per year, to verify its integrity and continued function.

The Permittee shall note the inspections on each month's DMR in the notes section.

S9. RECLAIMED WATER DISTRIBUTION AND USE

A. Authorized Uses and Locations

Beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to distribute water reclaimed in accordance with the terms and conditions of this permit for authorized uses.

The distribution by the Permittee of reclaimed water that does not meet the treatment, water quality and monitoring requirements established in this permit or the use of reclaimed water other than for authorized uses and locations listed in a Department of Health and Ecology approved reclaimed water engineering report shall constitute a violation of the terms and conditions of this permit.

The Permittee may produce and distribute Class A reclaimed water to public or private users for purposes such as, but not limited to, landscape irrigation, constructed wetlands discharge, ground water recharge, and industrial and commercial uses, at locations throughout the City as described the Department of Health and Ecology approved engineering report.

B. Water Reuse Plan

The Permittee shall maintain an up-to-date water reuse plan, which contains a summary description of the proposed water reuse system from the approved Engineering Report. The Permittee shall review the plan at least annually and the plan shall be updated whenever new uses or users are added to the distribution system. A copy of the revised plan shall be submitted to Ecology and Health. The plan shall contain, but not be limited to, the following:

- 1. Description of the reuse distribution system;
- 2. Identification of uses, users, location of reuse sites.
- 3. Evaluation of reuse sites, estimated volume of reclaimed water use, means of application, and for irrigation or surface percolation uses, the application rates, water balance, expected agronomic uptake, and potential to impact ground water or surface water at the site. Background water quality and hydro geological information necessary to evaluate potential water quality impacts is requested for surface percolation projects.

C. <u>Bypass Prohibited</u>

There shall be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. All reclaimed water being distributed for beneficial use must meet Class A requirements at all times. Water not meeting Class A must be retained for additional treatment by diversion to a bypass storage lagoon or discharged to an authorized wastewater outfall.

The Departments of Ecology and Health shall be notified by telephone within 24 hours of any diversion to a bypass storage lagoon or authorized outfall. Substandard wastewater shall not be discharged to the reclaimed water distribution system or use areas without specific approval from the Departments of Health and Ecology

D. Reliability

The Permittee shall maintain the highest reliability class as described in the Water Reclamation and Reuse Standards which require one of the following features for each of the critical reclamation treatment unit processes of oxidation, coagulation, filtration and disinfection:

- 1. Alarms and standby power source
- 2. Alarms and automatically actuated short-term (24-hour) storage or disposal provisions.
- 3. Automatically actuated long-term storage or disposal provisions for treated wastewater.

E. Use Area Responsibilities

- 1. A standard notification sign shall be developed by the Permittee using colors and verbiage approved by the state Department of Health. The signs shall be used in all reclaimed water use areas, consistent with the <u>Water Reclamation and Reuse Standards</u>.
- 2. Reclaimed water use, including runoff and spray shall be confined to the designated and approved use area.
- 3. The Permittee shall control industrial and toxic discharges to the sanitary sewer that may affect reclaimed water quality through either a delegated pretreatment program with the Department or assuring all applicable discharges have permits issued under the Water Pollution Control Act, Chapter 90.48 RCW, and the State Waste Discharge Permit Regulation, Chapter 173-216 WAC.
- 4. Where the reclaimed water production, distribution and use areas are under direct control of the permittee, the Permittee shall maintain control and be responsible for all facilities and activities inherent to the production, distribution and use of the reclaimed water. The Permittee shall ensure that the reuse system operates as approved by the Departments of Health and Ecology.

F. Service and Use Area Agreement

Where the reclaimed water additional treatment, distribution system, or use area is not under direct control of the permittee:

- 1. The person(s) who provides additional treatment, distributes, owns, or maintains control over the reclaimed water use area is responsible for reuse facilities and activities inherent to the production, distribution or use of the reclaimed water to ensure that the system(s) operate as approved by the Departments of Health and Ecology in accordance with this Permit.
- 2. Reclaimed water uses, including runoff and spray, shall be confined to the designated and approved use areas.
- 3. A binding Service and Use Area Agreement among the parties involved is required to ensure that construction, operation, maintenance, and monitoring meet all requirements of the Departments of Health and Ecology. This agreement must be consistent with the requirements of the Water Reclamation and Reuse Standards, 1997. A copy of each Service and Use Area Agreement must be submitted to and approved by the Departments of Health and Ecology prior to implementation.
- 4. The Service and Use Area Agreement shall provide the Permittee with authority to terminate service of reclaimed water to a customer violating the State Water Reclamation and Reuse Standards and restrictions outlined in the Service and Use Area Agreement. The Service and Use Area Agreements shall be approved by the Departments of Health and Ecology prior to the distribution of any reclaimed water.
- 5. No reclaimed water shall be distributed by the Permittee without a reclaimed water service and use agreement approved by the Departments of Health and Ecology.

G. <u>Irrigation Use</u>

- 1. For any irrigation use of reclaimed water, the hydraulic loading rate of reclaimed water shall be determined based on a detailed water balance analysis. The calculated loading rate(s) and the parameters and methods used to determine the loading rate(s) shall be submitted to the Department for approval.
- 2. There shall be no runoff of reclaimed water applied to land by spray irrigation to any surface waters of the state or to any land not authorized by approved use agreement.
- 3. There shall be no application of reclaimed water for irrigation purposes when the ground is saturated or frozen.
- 4. The reclaimed water shall not be applied to the irrigation lands in quantities that:
 - a. Significantly reduce or destroy the long-term infiltration rate of the soil.

- b. Cause long-term anaerobic conditions in the soil.
- c. Cause ponding of reclaimed water and produce objectionable odors or support insects or vectors.
- d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the reclaimed water, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.

The Permittee shall maintain all irrigation agreements for lands not owned for the duration of the permit. The Permittee shall inform the Departments of Health and Ecology in writing of any proposed changes to existing agreements.

H. <u>Surface Percolation Use</u>

- 1. For any surface percolation of reclaimed water the hydraulic loading rate shall be determined based on a detailed water balance. The calculated loading rate(s) and the parameters and methods used to determine the loading rates shall be submitted to the Department for approval.
- 2. Background/natural groundwater quality must be documented and sampling locations identified and approved by the Department.
- 3. Surface waters shall not be impaired due to the infiltration of reclaimed water.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

- A. All permit applications shall be signed by either a principal executive officer or a ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by a person described above and submitted to the Department.
 - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy at reasonable times and at reasonable cost any records required to be kept under the terms and conditions of this permit.
- C. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor at reasonable times any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
 - 1. Violation of any permit term or condition.
 - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 - 3. A material change in quantity or type of waste disposal.
 - 4. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR Part 122.64(3)].
 - 5. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR Part 122.64(4)].
 - 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
 - 7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:
 - 1. A material change in the condition of the waters of the state.
 - 2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.

- 3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
- 4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
- 5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
- 6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
- 7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
 - 1. Cause exists for termination for reasons listed in A1 through A7 of this section, and the Department determines that modification or revocation and reissuance is appropriate.
 - 2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

G4. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, but no later than 60 days prior to the proposed changes, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation of the terms and conditions of this permit.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least 180 days prior to the planned start of construction unless a shorter time is approved by the Department. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO REAPPLY

The Permittee shall apply for permit renewal by **February 1, 2010**.

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification

Except as provided in paragraph (B) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

- 1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
- 2. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
- 3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G10. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit.

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to \$10,000 and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to \$10,000 for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G16. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in Condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement preceding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G17. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G18. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G19. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G20. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or by both.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least 180 days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non critical water quality periods and carried out in a manner approved by the Department.

G22. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Department, it shall promptly submit such facts or information.

G23. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.